Volume 21, No. 2, March 2008

NoDak Pharmacy

Striving for Renewal

NDPhA 123rd Annual Convention

April 25-26-27, 2008

Best Western
Ramkota Hotel,

Bismarck ND

See page 5 - 9 for more details

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Mark Your Calendar

April Calendar Events

April 25-27, 2008
NDPhA 123rd Annual Convention, Bismarck

May Calendar Events

May 12-15, 2008
State Board of Pharmacy Meeting, Fargo

May 17-20, 2008
NAPB 104th Annual Meeting,
Baltimore, MD

May 19-21, 2008
NCPA National Legislative Conference,
Washington, DC

May 31, 2008
NDPhA Board of Directors Meeting,
Bismarck

June Calendar Events

June 8-11, 2008
ASHP Summer Meeting, Seattle, WA

The journal is supported by contributions from the Independent Pharmacy Cooperative (IPC) Community Pharmacy Commitment Program, Dakota Drug, Inc., McKesson Pharmaceutical and by the North Dakota State University College of Pharmacy, Nursing & Allied Sciences.

President's Message

Jerome Wahl
NDPhA President

Hi to all. As I am writing this, I am trying to survive our first really big chill for the year. Let's hope it's the last.

This quote came across my desk this past week, so I thought I would share it with you as it helps put things into perspective for me particularly when my day starts going a bit crazy. It is a quote by Mahatma Gandhi. "A customer is the most important visitor on our premises; he is not dependent on us. We are dependent on him. He is not an interruption in our work. He is the purpose of it. He is not an outsider in our business. He is part of it. We are not doing him a favor by serving him. He is doing us a favor by giving us an opportunity to do so".

I believe pharmacists in North Dakota, in whatever practice setting they work in, make this quote come alive every day. All of us recognize that the customer (patient) is the reason why we do what we do. Every day we have the opportunity to help our patients feel better and improve their quality of life. What a great job we have!

At the February NDPhA board meeting, the Northland Association of Pharmacy Technicians (NAPT) will be applying to be an academy within the North Dakota Pharmacist Association. They have their bylaws and mission statement completed. I suspect the Board will approve the academy status of the NAPT. Final approval will take place when the entire membership votes on it at the convention in April. We welcome anyone interested in becoming an academy to do so.

I would like to thank Dave Olig, Mike Schwab, Dawn Pruitt, John Saveageau, Howard Anderson, Tara Schmitz, all NDPSC and NDPhA Board members and many others for the time they devoted to making the Disease State Management for Diabetes a reality. All pharmacists in North Dakota should have received a letter from the NDPhA providing details on how to sign up for this program. Again, we are making a difference.

I would like to mention a couple of things relating to ISMP (Institute for Safe Medication Practices)

- Hospital pharmacies have procedures in place to deal with look-alike medications. The use of TALLman lettering is an example of reducing the potential of confusing one medication for another. (ex. is CLONazepam vs. clonIDINE) Medication bins are labeled with TALLman letters giving us another alert when dispensing medications.
- We have procedures in place that require nurses/ pharmacists to read back verbal and telephone orders from physicians. We know there are numerous sound-alike medications and those mistakes can happen when verbal or telephone orders are received. ISMP website has a look-alike and sound-alike list of medications called "Confused Drug Name List". This list can help us be more aware of medications with the potential for this type of error.
- Do you ever get asked the question, "Can I crush this medication"? I believe pharmacists are very good at knowing what meds can and cannot be crushed. However, new medications are continually being developed and marketed to physicians. ISMP website has an up to date list of medications called "Do Not Crush List".

Both these lists can be printed off of the ISMP.org website at no charge. I would encourage you to take a look at these lists.

Enough for now, I hope to see you at the April convention.

Striving for Renewal

123rd Annual Convention

Where & When

April 25-27, 2008
Bismarck Ramkota Hotel www.ramkota.com
800 S 3rd St
Bismarck, ND 58504

Registration

Registration forms are available at www.nodakpharmacy.net

Events

Friday & Saturday • Continuing Education • Exhibit Hall
• Ice Cream Social • Phun Run/Walk
• President's Banquet & Scholarship Auction
Sunday • Training for Diabetes Disease State Management Certificate Program

Hotels

Bismarck Ramkota Hotel **Room $84** **Suite $125**
A block of rooms and suites has been reserved under North Dakota Pharmacists Association. These rooms will be held until April 2, 2008. Call (701) 258-7700 to reserve a room or suite.

Other Area Hotels

Expressway Inn
200 E Bismarck Expressway (701) 222-2900

Expressway Suites
180 E Bismarck Expressway (701) 323-7147

Fairfield Inn South
135 Ivy Avenue (701) 223-9293

Radisson Hotel
6th & Broadway (701) 255-6000

College of Pharmacy, Nursing, and Allied Science, North Dakota State University, is accredited by the Accreditation Council of Pharmacy Education as a provider of continuing pharmacy education.

Annual Scholarship Auction

The annual Pharmacy Advancement Corporation Scholarship Auction will be held Saturday, April 26, 2008, during the NDPhA convention at the Ramkota Hotel in Bismarck. The auction committee would like to invite you to participate by donating items. Woodcrafters, quilters, and other artisans are always appreciated. As in years past, several items will be placed on a silent auction with the highlight of the evening being the "live" auction.

If you plan to attend the auction, please complete the auction registration form on the next page. The auction registration forms will be available at the convention as well. However, pre-registration identifies you as an auction participant and the appropriate information will be in your packet. You will be assigned a number and provided with an "auction paddle".

If you are making a donation to the auction, you will find forms on the NDPhA website www.nodakpharmacy.net. Please complete the form and return it with your donation. This will enhance our record keeping process and assist us in providing receipts to you more efficiently.

Please forward questions to Lorri at ndpha@nodakpharmacy.net or call 701-258-4968. Thank you for your participation in the past. We are looking forward to another outstanding auction.

Striving for Renewal

NDPhA 123rd Annual Convention
April 25-26-27, 2008
Best Western Ramkota Hotel, Bismarck ND

Name: _____

Mailing Address: _____
Street City State Zip

Phone: _____
Work Home

Email: _____

Spouse/Guest _____

Registration Fees:	Postmarked BEFORE April 11, 2008	AFTER April 11, 2008
Member Pharmacist	$150	$200
Member Technician	$90	$125
Non-Member Pharmacist	$300	$350
Non-Member Technician	$150	$200
Pharmacy or Technician Student	$50	$75
Student Sponsor (pharmacy or technician)		$50

Registration Total _____

Extra Meal Tickets (for spouses and other guests)

Lunch # of Tickets _____ x $10 = _____

Dinner # of Tickets _____ x $20 = _____

Brunch # of Tickets _____ x $10 = _____

Total Enclosed = _____

Your Registration includes your meals for the day(s) you are attending. Please check the meals and functions you plan to attend.

Friday

_____ Lunch

_____ Dinner

Saturday

_____ *NDPhA* Lunch **OR**

_____ *NDSHP* Lunch **OR**

_____ *NAPT* Lunch

_____ Phun Run / Walk

_____ Dinner

Sunday

_____ Brunch

Make Checks Payable to:

NDPhA 2008 Annual Convention

Mail Completed Forms and Payment to:

NDPhA
1641 Capitol Way
Bismarck, ND 58501
Or Fax to 701-258-9312

Type of Payment Check Visa MasterCard (Circle one)

Credit Card #: _____

Expiration Date: _____

Signature: _____

Pharmacy Advancement Corporation Scholarship Auction

STUDENT AUCTION DONATION FORM

PLEASE PRINT

PLEASE PRINT THE INFORMATION REQUESTED BELOW AND RETURN TO:

AUCTION, NDPhA, 1641 Capitol Way, Bismarck, ND 58501 or

Fax: 701-258-9312 or

Email: ndpha.@nodakpharmacy.net

DONOR _____ EMAIL ADDRESS _____

ADDRESS _____ PHONE _____

ITEM	QUANTITY	DOLLAR VALUE
ITEM	QUANTITY	DOLLAR VALUE
ITEM	QUANTITY	DOLLAR VALUE
ITEM	QUANTITY	DOLLAR VALUE
ITEM	QUANTITY	DOLLAR VALUE

DELIVERY IS THE RESPONSIBILITY OF THE DONOR.
Items are appreciated by 10:00 AM-Saturday, April 26.

The auction will be held on **Saturday, April 26, 2008**
at the Bismarck Ramkota Hotel

OFFICE INFORMATION

Solicitor:_____

Date Received_____ By_____

Striving for Renewal

Goals:
The goal of this program is to provide the participants with continuing pharmacy education relating to disease state management (smoking cessation, anticoagulation, diabetes, immunizations, and HIV/AIDS), financial and third party management, pharmacy law, and drug diversion.

Target Audience:
The programs are intended for community, hospital, clinical, consultant, and research pharmacists, as well as pharmacy technicians. It is also appropriate for any health care professional/practitioner with an interest in topics presented.

Objectives:
- Discuss the transfer of prescriptions, multiple filling of CII prescriptions
- Explain how to assure pharmacy services can continue through a disaster
- Describe the PDMP for patient care and how to use it
- Discuss quality assurance issues relating to dispensing of prescriptions
- Describe the pathophysiology of Diabetes that leads to the need for Insulin replacement therapy.
- Discuss the clinical importance of controlling fasting and post-prandial blood glucose levels.
- Describe the shortcomings associated with first generation animal and second generation human insulin formulations.
- Explain the dynamics of third generation insulin analogs.
- Evaluate clinical data examining the effects of upgrading from human to analog insulin formulations.
- Discuss the benefits of utilizing advanced insulin injecting devices.
- Provide information about the prevalence of domestic violence and its impact on prescription drugs.
- Explore the experiences of pharmacists in working with patients where domestic violence is present; and
- Address strategies for educating and training pharmacists in working with patients in domestic violence situations.
- Develop collaborative practices among pharmacists and mental health counselors in addressing domestic violence issues
- Discuss Drugs of Abuse/Methamphetamine and Meth Labs
- Explain Prescription Drug Diversion and Fraud Issues affecting pharmacy
- Discuss the etiology & clinical implications of HIV
- Discuss medications used to treat HIV/AIDS, highlighting new advances.
- Emphasize the role of pharmacy in the care of the HIV patient.
- Explain the pharmacy technician role in Quality Assurance
- Discuss how the pharmacy technician can help in a Pandemic Flu incident
- Describe consequences of not completing continuing education credit requirements
- Explain the pharmacy technician's role in the pharmacy's business continuation plan
- Explain how to sell controlled substances to a practitioner
- Explain Risk Management and Asset Protection
- Develop a retirement plan as a high net worth individual
- Describe tax diversification, avoidance, and minimizing strategies
- Summarize the public health impact of pertussis, human papilloma virus, and herpes zoster.
- Outline the CDC recommendations for vaccine administration.
- Identify contraindications and limitations for use of vaccines.
- Discuss vaccine administration and storage issues.
- Outline opportunities for implementation or expansion of pharmacist-administered immunizations.
- Describe nicotine pharmacology and principles of addiction.
- Recommend a tobacco cessation product(s) based on customer/patient needs
- Identify the factors known to influence a patient's warfarin dosage requirements
- Describe the recent changes to the FDA package labeling of warfarin
- Evaluate what we currently know about genetic influences on warfarin dosing and decide how this information should be used in clinical practice
- Discuss the rationale for implementing a comprehensive anticoagulation service
- List potential barriers to implementing a pharmacist-managed anticoagulation clinic
- Discuss current reimbursement options for pharmacists billing for anticoagulation management services
- Explain the individual fields in the processing system and the importance of each
- Discuss the potential impact of inaccurate information entry
- List the most common audit discrepancies
- Describe clinical characteristics of MRSA infections
- Describe the ever changing epidemiology of MRSA
- Identify, prevent, and treat MRSA infections
- Describe the PDMP
- Identify the legality of internet prescriptions
- List two examples of legal expedited partner therapy
- Explain how to report a co-worker who is endangering the public
- Outline a monitoring and management program for diabetic patients
- Explain how to document pharmacist diabetes care services using MMS system
- Demonstrate how to use a diabetes blood glucose monitor and explain results to patients

FRIDAY, APRIL 25, 2008

7am-6pm **Registration**
7-8am **Breakfast** *Sponsored by Midco Data*
8-9am **Legal Decisions for the Pharmacist**
Howard Anderson, Executive Director, ND Board of Pharmacy UPN: 047-999-08-109-L03P and 047-999-08-109-L03T (0.1CEU)
9-10am **Advancements in Insulin Therapy: The Use of Insulin Analogs**
Anthony DeFilippo, RPh MBA CDE
UPN: 047-999-08-110-L01P (0.1 CEU)
OR
A Roundtable discussion of the Role of the Pharmacist in Intimate Partner (Domestic) Violence
Dr. Kimberly Halbur and Dr. Brenda Hall, North Dakota State University
UPN: 047-999-08-123-L04P and 047-999-08-123-L04T (0.1 CEU)
10am-1pm **Exhibitor Theatre**
10-10:15am **Coffee Break**
10:15-11:15am **Drugs of Abuse** *Special Agent Ben Leingang, ND Bureau of Criminal Investigation*
UPN: 047-999-08-121-L04P and 047-999-08-121- L04T (0.1CEU)
12-1pm **Lunch**
1pm-2:30pm **Clinical Update: Care of the HIV Patient in 2008**
Robert Nelson, PharmD Clinical Manager of Pharmacy Services, Meritcare
UPN: 047-999-08-112-L02P (0.15 CEU)
OR
Important Legal Issues for the Technician
Howard Anderson, Executive Director, ND Board of Pharmacy UPN: 047-999-08-113-L03P and 047-999-08-113-L03T (0.15 CEU)
2:30-3pm **Break**
3pm-4pm **Town Hall Meeting**
4-4:30pm **Ice Cream Social** *Sponsored by Dakota Drug*
4:30-6:30pm **First NDPhA Business Meeting**
UPN: 047-999-08-122-L03P and 047-999-08-122-L03T (0.05 CEU)
6:30-7pm **Social**
7pm **Dinner** *Sponsored by Dakota Drug*
Entertainment Hypnotist Kevin Lepine
Sponsored by H & H

SATURDAY, APRIL 26, 2008

7am-6pm **Registration**
7-8am **Breakfast** *Sponsored by Thrifty White Drug*
8:30-10:30am **Gaining Better Control Over Your Financial Health**
Eli T. Hjermstad, North Star Professional Center
UPN: 047-999-08-114-L04P (0.2 CEU) OR
2008 Immunization Update: You'll Be Stuck Without It
Melissa Bumgardner, Pharm.D., BCPS University of MN College of Pharmacy, Duluth
UPN: 047-999-08-115-L01P (0.2 CEU)
10:30-11:30am **Second NDPhA Business Meeting**
UPN: 047-999-08-122-L03P and 047-999-08-122-L03T (0.025 CEU)
11:30-1:00pm **NAPT Lunch and Meeting**
NDPhA Lunch and Meeting
NDSHP Lunch and Meeting
1-3:00pm **Smoking Cessation**
Wendy Brown, PharmD, Professor, NDSU College of Pharmacy, Fargo
UPN: 047-999-08-116-L01P (0.2 CEU)
The Pharmacogenomics of Warfarin; Should We Genotype Everyone on Warfarin?
Michael P. Gulseth, Pharm. D., BCPS University of Minnesota College of Pharmacy, Duluth/ St. Mary's Medical Center Duluth, MN
UPN: 047-999-08-117-L01P (0.1 CEU)
AND
Implementing Anticoagulation Services
Kelly T. Epplen, PharmD, CACP Clinical Coordinator Ambulatory Pharmacy Services Health Alliance, Cincinnati
UPN: 047-999-08-118-L01P (0.1 CEU)
3-4:00pm **Proper Processing of Prescription Claims and Impact on Audits**
Kamie Kueneman, Pharm.D., Director of Clinical Pharmacy Programs, Prime Therapeutics
UPN: 047-999-08-111-L04P and 047-999-08-111-L04T (0.1 CEU)
OR
Update on MRSA *Dr. Kent Martin, Infectious Disease, Med-Center One, Bismarck, ND*
UPN: 047-999-08-119-L01 P (0.1CEU)
4-5:00pm **Third NDPhA Business Meeting**
UPN: 047-999-08-122-L03P and 047-999-08-122-L03T (0.025 CEU)
5:00-6:00pm **Phun Run/Walk**
6:30 **Social**
7pm **President's Banquet** *Sponsored by McKesson*
Awards Ceremony
NDSU College of Pharmacy Scholarship Auction

SUNDAY, APRIL 27, 2008

7:30-8am **Breakfast**
8-8:45am **Memorial Service**
9:00-1:00pm **Diabetes Disease State Management Training**
• *Sam Testa, RPh, Medication Management Services*
• *Priya Bardal, PharmD, Practice Accounts Manager, Medication Management Services*
• *Marlene Wolff, Account Representative, LifeScan, a Johnson & Johnson company*
• *Michael Schwab, Executive Vice President, North Dakota Pharmacist Association*
• *Tara Schmitz, PharmD, CPE Director, NDSU College of Pharmacy, Nursing, and Allied Sciences*
• *Cynthia Naughton, PharmD, BCPS, Assistant Professor, NDSU College of Pharmacy*
• *Mark Dewey, PharmD., CGP, Assistant Professor, NDSU College of Pharmacy*
UPN: 047-000-08-603-L01-P (0.4 CEU)

Adjorn

"The College of Pharmacy, Nursing, and Allied Sciences, North Dakota State University, is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education."

Continuing Education Credit: A statement of credit will be mailed to those participating in the program within 4-6 weeks. Satisfactory completion will be assessed by completion of an attendance roster and an evaluation of learning.

Financial Support: Unrestricted educational grants have been provided by Novo Nordisk, Merck, Pfizer, and North Dakota AIDS Education and Training Center. Additional grant applications pending.

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Continuing Education for Pharmacists

Volume XXV, No. 2

Challenges in Pharmacy Practice: Impact of Medical Errors on Patient Health

Thomas A. Gossel, R.Ph., Ph.D.
Professor Emeritus
Ohio Northern University
Ada, Ohio

and

J. Richard Wuest, R.Ph., PharmD
Professor Emeritus
University of Cincinnati
Cincinnati, Ohio


Gossel


Wuest

Goal. The goal of this lesson is to discuss the nature, extent and potential seriousness of medical errors and their consequences in the U.S. health care system.

Objectives. At the conclusion of this lesson, successful participants should be able to:

1. recognize the impact of the Institute of Medicine's report "To Err is Human..." on health care professionals and the public;
2. define the terms *safety* and *error*, and differentiate between *medical* error and *medication* error;
3. demonstrate an understanding of the nature and extent of the impact of medical errors on the nation's resources and the national economy; and
4. identify the different challenges that hospital and community pharmacies encounter concerning medication errors.

Background

Early in this century a relatively little known and negative characteristic of the American health care system received broad exposure in both the professional literature and public press. Numerous reports suggested that there are a large number of medical errors resulting in significant patient injury and even death. One specific report led the pack in attempting to shock the public, and called for immediate and rigorous corrective actions to bring about improved patient health and safety.

To Err is Human

The U.S. Institute of Medicine (IOM) is an organization created by the National Academy of Sciences to advise Congress and public policymakers of issues related to public health. The goal of the IOM is to develop a comprehensive strategy to improve health care in the United States.

It was the IOM's December 1999 book-length report entitled *To Err is Human: Building a Safer Health Care System* that grabbed the nation's attention. *To Err is Human…* opened with "The knowledgeable health reporter for the Boston Globe, Betsy Lehman, died from an overdose during chemotherapy. Willie King had the wrong leg amputated. Bob Kolb was eight-years-old when he died during "minor" surgery due to a "drug mix-up." The report emphasized the significance of medical errors, revealing that the headline cases represented only a small fraction of what could be an alarmingly huge problem. The release of *To Err is Human …* was an attempt to serve as the catalyst for medical error, especially medication error, reform.

The IOM estimated that between 44,000 and 98,000 patients die each year in the United States as an unfortunate result of medical errors. It should be kept in mind that these numbers are estimates, not facts. The authors stated that of the 44,000 deaths, a minimum of 7,000 deaths annually can be attributed to prescribing or dispensing errors. Indeed, medication errors had been studied for more than three decades before the IOM report was released, but there are still few incentives or requirements in place for hospitals, clinics or community pharmacies to implement broad changes that would improve patient safety.

The report continued by explaining that the mortality figures cited above were obtained from two Harvard Medical Practice Studies that examined large samples of hospital admissions in Colorado and Utah, and another in New York state. Adverse events occurred in 2.9 percent of New York admissions and in 3.7 percent in Colorado/Utah. The extent of those adverse events caused by medical error was 63 percent and 58 percent, respectively. Death was the outcome of 13.6 percent of adverse events in New York hospitals and 8.8 percent of adverse events in Colorado/Utah hospitals. Over half of the adverse

events in both studies resulted from medical errors that could have been prevented.

Medical errors, as estimated in the IOM report, rank as the eighth leading cause of death in the United States, killing more people each year than the combined outcomes of motor vehicle accidents, breast cancer, or AIDS, causes that receive far more public attention. Between 1983 and 1998, U.S. fatalities from acknowledged prescription errors reportedly increased by 243 percent.

The authors stated that not only was the estimated number of deaths appalling, the annual cost of errors would likewise be staggering. *To Err is Human…* estimated the total national costs representing lost income, lost household production, disability, and health care costs of preventable medical errors to be between $17 and $29 billion annually, with health care costs accounting for more than half of that total. One recent study, conducted at two prestigious teaching hospitals, showed that about two of every 100 admissions experienced a preventable adverse drug event as a result of a medical error, resulting in increased hospital costs averaging $4,700 per admission or about $2.8 million annually for a 700-bed teaching hospital.

Money spent on having to repeat diagnostic tests or counteract adverse drug events are health care dollars unavailable for other purposes. Everyone "pays" for errors with increased insurance costs and co-payments.

Errors also cost in subjective terms of loss of trust in the system by patients, and diminished satisfaction by both patients and health care professionals. Employers and society pay in terms of lost worker productivity and reduced school attendance by children. Additionally, there are the costs of malpractice insurance, litigation and payouts.

Since most data cited within the IOM report originated from studies within hospitals, the authors believed that their estimates were quite conservative and even underestimated. The data did not account for ambulatory settings such as outpatient surgical centers, physician offices, clinics and home care services, and community pharmacies.

The literature abounds with reports of errors in physician prescribing and pharmacist dispensing, and unintentional patient nonadherence with their therapeutic directives. According to *To Err is Human…*, such errors will likely increase as technology improves, and as new medications for a wider range of indications are introduced.

*To Err is Human …*also had an effect on state and federal legislation aimed at reducing medical errors, including issues such as confidentiality, voluntary and mandatory reporting of errors, and protection from legal discovery. As a direct result, there have been minimal, but consequential, changes due to increased emphasis on patient safety by the FDA, accrediting bodies such as the Joint Commission on Accreditation of Health Care Organizations (JCAHO), numerous professional societies and organizations, and business communities.

At the same time, the issues put forth by the IOM report have not been universally accepted. A follow-up editorial to *To Err is Human…* published in *JAMA* noted that errors are still not discussed as openly as they should be because of the generalized feeling that individual diligence should prevent errors. While some errors, of course, are due to personal negligence, most reportedly can be traced to poorly designed processes and/or faulty systems, conditions of care that need to be corrected.

According to a 2007 report on medication errors and recommendations issued by the Washington State Department of Health, system breakdown can lead to human errors such as illegible prescriptions and medication orders, drugs that look alike and are packaged alike, adverse drug interactions, patients who take their medications incorrectly, and patients who are given improper medications or incorrect instructions for use. It is suggested that when errors are discussed openly, the unfortunate focus too often is to point fingers; i.e., to attribute blame to caring health care professionals who make honest mistakes. The outcome is to raise the threat of malpractice with fear of legal action, humiliation, and job loss, rather than focusing attention on error-prone systems or other deficiencies in the health care process.

To Err is Human… concludes that most errors and safety issues, therefore, go undetected and unreported, both externally and within health care organizations. Human error can be approached in two ways: a *person approach* and a *system approach*. With the former, errors are treated as moral issues, which encourages the hiding of mistakes while doing little or nothing to eliminate the causative elements. In the system approach within hospitals, blame is not allocated to a person(s); instead, errors are treated as an outcome of interactions between the individual, the team, the task, the workplace, and the institution.

Are the Figures Accurate?

Estimates of injury and mortality rates claimed by the IOM are not universally accepted. Subsequent data from various sources suggest that the report may have underestimated the magnitude of the problem. Nosocomial infections alone, most of which are preventable, reportedly account for more than 90,000 deaths in the United States each year, and hospital-acquired blood infections alone may rank as the eighth or ninth leading cause of death in the United States. If one believes that preventable medical injuries should never occur, it can be concluded that the issue is indeed a serious problem. The question perhaps should not so much ask whether there is a problem, but rather, what can be done about it.

Patient Safety

Safety has been defined as freedom from accidental injury. The term recognizes that safety is a primary concern from the patient's perspective. *Error* can be defined as the failure of a planned action to be completed as intended or the use of a wrong plan to achieve an aim. Error depends on one of two types of failure: either the correct action does not proceed as intended (error of execution) or the original intended action is incorrect (error of planning). Errors can occur at any or all stages in the process of patient care, from diagnosis to preventive care.

Not all errors result in harm. An adverse event is any injury that results from a medical intervention, that is, not necessarily due to the patient's underlying condition. While all adverse events result from the medical management process, not all are preventable (i.e., not all are attributable to error). For example, following surgery, a patient who dies from a respiratory infection that developed postoperatively cannot be said to have experienced an adverse event. If review of the case reveals that the person developed the infection because of poor handwashing by the surgeon or improper instrument cleaning technique, the adverse event would then be described as preventable (attributable to an error of execution). The analysis may conclude, however, that no error occurred, and the patient would be presumed to have experienced a difficult surgery and recovery (not a preventable adverse event).

If drug dispensing were the only activity in the medication-use process, the pharmacist could potentially solve all problems and prevent medication errors from occurring. Because the medication-use process is highly complex, especially in most large hospitals, effective improvements require collaborative effort from all health care professionals.

According to the IOM, establishing a multidisciplinary committee to address medication errors in the hospital setting should, therefore, be an integral part of a medication error management program. The committee could address all aspects of health care, both for inpatients and outpatients. The IOM further adds that to encourage reporting, health care professionals should feel they are practicing in a nonpunitive environment. A focus on "who did it" rather than "what went wrong" can seriously limit the institution's ability to identify and correct problems, and therefore discourage error reporting.

Medical Errors

The phrase *medical error* may be thought of as an umbrella term that includes all mistakes that occur within the health care system, including prescribing, dispensing, or administering medication, and all diagnostic errors, equipment failures, and mishandled surgeries. Medical error, as cited earlier, is reportedly a major problem in the United States and elsewhere, in both primary and secondary care settings. The literature is, unfortunately, plagued with terminology that attempts to describe patient safety and is indeed difficult to understand.

For example, a 2005 editorial in the *International Journal for Quality in Health Care* compared the taxonomy of medical errors to the biblical Tower of Babel! The author noted that an *adverse reaction* or *complication of care* usually connotes an anticipated side effect of a medication or treatment. An *adverse event*, in contrast, denotes the presence of a medical care-related injury (whether anticipated or not). A *preventable adverse event* is an error by definition, but it is often difficult to determine its preventability. A *near miss* or a *close call* is synonymous with *potential adverse event* and is considered to be preventable. A *sentinel event* refers to an incident that results in or might have produced a serious injury.

Other authors use terms that attempt to describe medical errors as *unintended consequence*, *untoward event* and *nontherapeutic result*. Some medical and pharmaceutical publications have diluted the impact of medical errors by referring to them as *therapeutic misadventures*. For the reader's clarification, medical errors can be characterized as shown in Table 1.

Table 1
Types of Medical Errors*

Diagnostic
- Error or delay in diagnosis
- Failure to employ indicated tests
- Use of outmoded tests or therapy
- Failure to act on results of monitoring or testing

Treatment
- Error in the performance of an operation, procedure, or test
- Error in administering the treatment
- Error in the dose or method of using a drug
- Avoidable delay in treatment or in responding to an abnormal test
- Inappropriate (not indicated) care

Preventive
- Failure to provide prophylactic treatment
- Inadequate monitoring or follow-up of treatment

Other
- Failure of communication
- Equipment failure
- Other system failure

*Abstracted from Reason JT. *Human Error*. Cambridge: Cambridge University Press, 1990. and Leape LL, *et al*. *QRB Qual Rev Bull*. 1993;19:144-149.

Medication Errors

According to an IOM estimate, in any given week, four out of five adults in the United States will use prescription medicines, over-the-counter drugs, or dietary supplements or herbal remedies of some sort; nearly one-third of adults will take five or more different medications. In general, these preparations will benefit the individual and cause no harm; on occasion, however, they will injure the individual. Some of

Table 2
Medication Use Process*

Prescribing
- Assessing the need for and selecting the correct drug
- Individualizing the therapeutic regimen
- Designating the desired therapeutic response

Dispensing
- Reviewing the order
- Processing the order
- Compounding and preparing the drug
- Dispensing the drug in a timely manner

Administering
- Administering the right medication to the right patient
- Administering medication when indicated
- Informing the patient about the medication
- Including the patient in administration

Monitoring
- Monitoring and documenting patient's response
- Identifying and reporting adverse drug events
- Re-evaluating drug selection, regimen, frequency and duration

Systems and Management Control
- Collaborating and communicating among caregivers
- Reviewing and managing patient's complete therapeutic drug regimen

*Abstracted from Nadzam DM. *Am J Hosp Pharm*. 1991;48:1925-1930.

these "adverse drug events" are inevitable – the more potent a drug, the more likely it is to have harmful side effects. But, sometimes the harm is caused by an error in prescribing or administering/taking the medication, and these damages are not inevitable. They can be prevented.

As defined by the National Coordinating Council for Medication Error Reporting and Prevention, a *medication error* is "…any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient, or consumer. Such events may be related to professional practice, health care products, procedures, and systems, including prescribing; order communication; product labeling, packaging, and nomenclature; compounding; dispensing; distribution; administration; education; monitoring; and use."

Ensuring correct medication use is certainly a complex process that involves multiple professionals from various disciplines, a solid knowledge of pharmacotherapy principles and drug products, and timely access to accurate and complete patient information. Table 2 lists the numerous steps involved in the medication use process. Errors can occur during any of these steps, including *errors of commission* (e.g., administration of improper drug) and *errors of omission* (e.g., failure to administer a drug that was prescribed).

Medication errors are a concern in acute care hospitals. A 2000 report indicated that inpatient medication ordering errors occur in 6 to 10 percent of all hospitalized patients. Most are harmless, but 1 to 2 percent cause injury and an additional 5 percent are near-misses.

Unfortunately, relatively few data are available regarding the frequency and impact of medication errors in community pharmacies. Copies of prescriptions from community pharmacies are not readily available for review, and patients obtain prescriptions from multiple outlets. Prescriptions for ambulatory patients usually include more parameters and, hence, increased chance for error. Some examples may include the number of dosage units to be dispensed and number of refills, the prescriber not being on the premises and poor handwriting.

Moreover, community-based pharmacists may bear additional burdens of responsibilities not directly related to patient care, such as dealing with third-party payors. Community practice sites also offer a larger number of classes and brands of drugs than typical hospital settings. The providers may be less familiar with correct prescribing parameters. Monitoring drug usage in community sites is more of a challenge because patients frequently obtain and administer their own medications.

Realistically, a major reason for lack in reporting medication errors in community practice is corporate and insurance company policies prohibiting discussing anything that is in litigation, or may lead to a potential lawsuit. Also, privacy issues are involved.

Overview and Summary

An important way to help prevent an error is to learn from previous errors, and instill mechanisms that will increase opportunities to find and prevent future medication errors from occurring. Although the estimates and recommendations of *To Err is Human…* are not universally accepted, its impact on attitudes and organizations has been profound. Moreover, health care leaders have learned a great deal about safety that they were not aware of in 1999. The groundwork for improving safety has been laid.

The content of this lesson was developed by the Ohio Pharmacists Foundation, UPN: 129-000-07-012-H05-P. Participants should not seek credit for duplicate content.

Continuing Education Quiz

Challenges in Pharmacy Practice: Impact of Medical Errors on Patient Health

1. The U.S. Institute of Medicine (IOM) is an organization created by the:
   a. American Medical Association.
   b. Food and Drug Administration.
   c. Joint Commission on Accreditation.
   d. National Academy of Sciences.
2. The IOM estimated that a minimum of how many deaths annually can be attributed to prescribing or dispensing errors?
   a. 4,400 c. 44,000
   b. 7,000 d. 70,000
3. The IOM report stated that the mortality figures cited above were obtained from studies examining samples of hospital admissions in all of the following states EXCEPT:
   a. Colorado. c. Ohio.
   b. New York. d. Utah.
4. Medical errors, as estimated in the IOM report, rank as the:
   a. 8th leading cause of death in the U.S.
   b. 6th leading cause of death in the U.S.
   c. 4th leading cause of death in the U.S.
   d. 2nd leading cause of death in the U.S.
5. The IOM's report To Err is Human: Building a Safer Health Care System stated that errors in physician prescribing and pharmacist dispensing, and unintentional patient nonadherence with their therapeutic directives will likely:
   a. decrease as technology improves.
   b. increase as technology improves.
6. The above report further states that most errors are due to:
   a. poorly designed processes.
   b. personal negligence.
7. The above report concludes that approaching errors as an outcome of interactions between the individual, the team, the workplace, and the institution is an example of the:
   a. institutional approach.
   b. personal approach.
   c. system approach.
   d. universal approach.
8. An adverse event is best described as any injury that results from:
   a. the patient's underlying condition.
   b. a preventable error.
   c. poor product design.
   d. a medical intervention.
9. According to the publication cited in Table 1, all of the following are types of medical errors EXCEPT:
   a. diagnostic error. c. treatment error.
   b. preventive error. d. therapeutic misadventure.
10. According to the publication cited in Table 2, identifying and reporting adverse drug events is a function of which of the following Medication Use Processes?
    a. Administering c. Monitoring
    b. Dispensing d. Systems Control

Challenges in Pharmacy Practice: Impact of Medical Errors on Patient Health

March 2008 ACPE **#047-999-07-012-HO5-P**

The Ohio Pharmacists Foundation Inc and NDSU College of Pharmacy are approved by ACPE as providers of continuing pharmaceutical education. To receive 1 1⁄2 hours (0.15 CEUs) of continuing education credit, complete the following and mail with $10.00 to:

Continuing Pharmacy Education Office
Department of Pharmacy Practice
North Dakota State University
123 Sudro Hall - P.O. Box 5055
Fargo ND 58105-5055

Note: Answer sheet may be copied as needed but original answers are required on each.

Name _____

Social Security Number (SSN) XXX-XX- __ __ __ __

Address _____

City_____State _____

Zip_____

Your SSN will be used to maintain a permanent record of the courses you have taken. Your SSN will be kept confidential and will be used ONLY to identify you at NDSU.

COURSE EVALUATION

Evaluation Must Be Completed To Obtain Credit

How much time did this lesson require? _____

Today's Date_____

EXPIRATION DATE: 12-15-10

Learning objectives on first page were addressed.

1 Disagree - 5 Agree

Objective 1	1	2	3	4	5
Objective 2	1	2	3	4	5
Objective 3	1	2	3	4	5
Material was well organized and clear.	1	2	3	4	5
Content sufficiently covered the topic.	1	2	3	4	5
Material was non-commercial in nature.	1	2	3	4	5

Answer Sheet:

1.	a	b	c	d	6.	a	b		
2.	a	b	c	d	7.	a	b	c	d
3.	a	b	c	d	8.	a	b	c	d
4.	a	b	c	d	9.	a	b	c	d
5.	a	b			10.	a	b	c	d

John Savageau
President, NDSHP

Disease State Management

The disease state management program is finally coming together. Congratulations are due to Mike Schwab. For those who were not involved in the diabetes disease management negotiations, it took a lot of hard work, patience, and persistence by Mike. It is especially amazing since he did this in his first year as EVP. I hope all health systems pharmacist's will become involved in the continued success of the DSM program. Those working in health systems are uniquely positioned to facilitate the success of the program by capitalizing on the close working relationship we have established with practioners. The success of the program will depend on many pharmacists quickly working with patients to collect the necessary data. While on the subject of DSM and congratulations, I think we as a profession have arrived at the concept of disease management partly do to the work of clinical pharmacist many years ago. Many of them have moved on to director positions or academia. Their persistence and vision, has given current clinical pharmacists tremendously rewarding opportunities within the health systems.

Many of you received a letter asking you about your practice setting and membership status. I received a few critical comments back that I want to quickly address. The first comment was, "why is NDSHP changing the bylaws?" My response is that we are not changing any bylaws. We, NDSHP board, are in response to NDPHA's desire to move to academy status, attempting to comply with the bylaws set many years ago. Without establishing the voting rights of each member, any vote we take in the current membership could be legally challenged. The second comment is, "why is NDSHP trying to divide the association by excluding other pharmacists from belonging?" Emphatically, we are not. The decision to move towards academy status was not initiated by NDSHP. It was the desire of NDPHA and the current board is attempting to determine what the NDSHP members want.

Recently, I was contacted by several pharmacists about their telepharmacy concerns for rural hospitals. After receiving much criticism and feedback, I have concluded that we as health systems pharmacist need to be more active in attempting to meet the needs of the rural hospitals. After-all, we deal with these medications every day and are the experts in the delivery of them. As many of you know, the correct delivery and administration of hospital medications is equally as important to the selection of the medication. That being said, a need can not be meet if it is not known. As telepharmacy emerges for rural hospitals, hospital pharmacists need to be involved in the oversight to insure a quality program is in place. We, hospital pharmacists, have the expertise and must be willing to offer it to the Board of Pharmacy. NDSHP is in the process of formulating a position statement regarding hospital telepharmacy. NDSHP has never been contacted to assist in the past two years. As NDSHP president, I would encourage anyone to contact me to discuss their needs.

In case a pharmacist cannot find a local physician or NP to work with, State Health Officer Dr. Dwelle has offered to sign a protocol for any pharmacist willing to do immunizations. Thanks to pharmacist Dave DeBuhr for working to get this setup.

Immunization Protocol
Authority to Immunize
Authority to Initiate Immunization
Standing Prescription Order to Administer Immunizations

_____ND License #_____, acting as an authorized pharmacist on behalf of the undersigned physician, according to and in compliance with the North Dakota State Pharmacy Practice Act, may administer the medications listed below to patients ages 18 and older on the premises of _____(address), or elsewhere upon notification of sponsoring physician for a time period equal to two years from the date this document is signed.

NDPHA Immunization program 11/18/2001

To protect people from preventable infectious diseases that cause needless death and disease, the above pharmacist may administer the following immunizations to eligible adult patients, ages 18 and older, according to indications and contraindications recommended in current guidelines from the Advisory Committee on Immunization Practices (ACIP) of the U.S. Centers for Disease Control and Prevention (CDC) and other competent authorities:

Influenza Vaccine, IM or IN
Hepatitis A Vaccine, IM
Hepatitis B Vaccine, IM
Human papillomavirus (HPV-4) Vaccine, IM
Measles, mumps rubella (MMR) Vaccine, SC
Meningococcal conjugate (MCV-4) Vaccine, IM
Pneumococcal polysaccharide (PPV-23) Vaccine, IM or SC
Tetanus, diphtheria, pertussis (Td/Tdap) Vaccine, IM
Varicella (chickenpox) Vaccine, SC
Varicella zoster (shingles) Vaccine, SC

All IM injectable vaccines will be given in the deltoid muscle. All SC injections will be given in the fatty tissue over the triceps muscle. IN influenza vaccine will be given by intranasal route.

Other vaccines may be added or deleted from this list by supplementary instruction from the undersigned.

In the course of treating adverse events following immunization, the pharmacist is authorized to administer epinephrine (in the form of an Epi-Pen at 0.3mg per dose) and diphenhydramine (at a dose of 1mg/kg; maximum 50-100 mg per dose) by appropriate routes as necessary. The pharmacist will maintain current certification in CPR.

In the course of immunization, the pharmacy will maintain perpetual records of all the immunizations administered. Before immunization, all vaccine candidates will be questioned regarding previous adverse events after immunization, food and drug allergies, current health, immunosuppression, recent receipt of blood or anti-body products, pregnancy, and underlying diseases. All vaccine candidates will be informed of the specific benefits and risks of the vaccine being offered. All vaccine recipients will be observed for a suitable period of time after the immunization for adverse events.

All vaccine recipients will be given a written immunization record. The immunization will be reported to their primary care provider by fax or mail within 48 if pursuant to an order. The immunization will also be reported to the North Dakota Immunization Information System (NDIIS) within 14 days of administration per 61-04-11-06(1)(b).

The pharmacist will not endeavor to disrupt existing patient-physician relationships. The pharmacist will refer patients needing medical consultation to a physician. The pharmacist will make special efforts to identify susceptible people who have not previously been offered immunizations.

The pharmacist shall submit evidence of adequate liability insurance (a claim limit of $1 million and an aggregate limit of $3 million) upon signature of this agreement.

The authorization will be valid two years from the date indicated below, unless revoked in writing.

Pharmacist Name: _____

Pharmacist Signature: _____

Pharmacy License #: _____

Date: _____

Physician Name: Terry Dwelle, MD

Physician Signature: _____

Address: 600E. Boulevard Ave

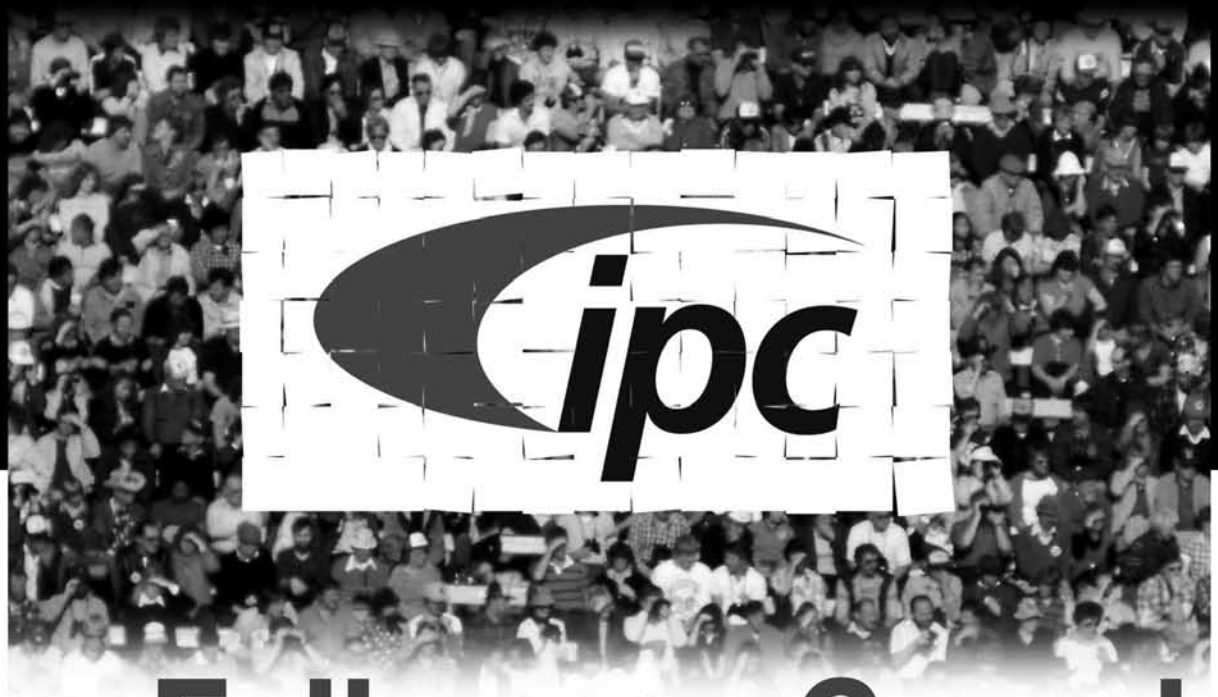
City: Bismarck State: ND Zip: 58505

Medical License #: 7469

Date: _____

Reminder: Submit evidence of adequate liability insurance.

Sometimes it's OK



to Follow the Crowd

You don't have to be alone to be independent.

6,000 independent pharmacies have discovered the multitude of reasons to take advantage of Independent Pharmacy Cooperative (IPC) and our value-loaded programs. Our competitive pricing, top quality and superb service have made us one of the fastest growing alternative source vendors for independent pharmacy in the nation.

When you buy from us, you get the best of both worlds. You retain your independence and make all decisions affecting your direction and bottom line. Plus, you can take advantage of low volume-based pricing and vast selection with daily access to our 75,000 square-foot distribution facility.

See why so many independents choose IPC: daily free delivery on Rx; significant savings and great selection of OTC and General Merchandise items; over 30 categories of traffic boosters through IPC negotiated contracts; plus, a super variety of promotional or seasonal products.

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Be independent AND part of the winning crowd with IPC.

Part D Reimbursement Debate Continues; Local Pharmacies Cope

By Teresa Oe

When Medicare Part D was implemented, the pharmacy industry experienced landmark changes. No. 1—the volume of seniors purchasing prescription drugs increased as affordability increased. No. 2—pharmacy reimbursement for dispensing drugs decreased.

From the outside looking in, it appears that the increase in volume would offset the decrease in reimbursement rates, keeping pharmacies in good shape. A local pharmacist knows this isn't true.

In 2006, following the Part D kickoff, 1,152 community pharmacies throughout the country went out of business.

"This was the first time anything so drastic happened in the industry," says Charlie Sewell, senior vice president of government affairs for the National Community Pharmacists Association. "We lost 5 percent of the independent pharmacies in the nation in one year."

Sewell attributes the loss to "low and slow reimbursement" and paints a picture of dangerously thin operating margins with results from two recent industry studies.

One of the studies, conducted by the Office of the Inspector General (OIG) of the Department of Health and Human Services, measured the difference in drug acquisition costs and Part D payments to community pharmacies. The study was initiated at the request of 33 senators who realized the seriousness of the reimbursement issue when so many of the nation's independents went out of business.

Early this year, the results of the study were released in a report titled, "Review of the Relationship Between Medicare Part D Payments to Local, Community Pharmacies and the Pharmacies' Drug Acquisition Costs."

The OIG report estimates that community pharmacies receive $9.13 more per prescription in Part D payments than they pay for the actual drugs, including wholesaler rebates. The average Part D dispensing fee reimbursement is $2.27, bringing total compensation to $11.40 per prescription.

Where the problem lies, Sewell says, is in the margin between this compensation and the actual costs to dispense prescriptions. While the OIG report did not measure overhead, a study conducted in 2007 by Grant Thornton, LLP, did.

Researchers found that the average cost to dispense a prescription drug is $10.50. When compared to the $11.40 reimbursement figure, it shows that pharmacies actually yield a net profit of only 90 cents per Medicare prescription.

"With an average prescription price of $68.26, we're talking a 1.3 percent net profit margin—a penny on the dollar," Sewell says. "These studies clearly prove that community pharmacies' margins are razor thin."

North Dakota Perspectives

Dave Olig, owner of Southpointe Pharmacy and Prescription Center Pharmacy in Fargo, echoes the sentiment of many pharmacists when he says, "I deeply believe we need to make senior citizens' prescriptions more affordable, but Part D is poorly crafted and extremely expensive to pharmacists and taxpayers."

Olig says Part D has driven community pharmacists to extreme cost reduction. For him, this meant getting a robot to fill prescriptions, rather than rehiring when an employee left. He is also considering "central fill," which entails sending all refill orders to be processed at one facility outside of the pharmacy. With similar scenarios throughout the country, Olig says, "A lot of technicians are going to lose their jobs to Part D."

Bob Treitline, owner of ND Pharmacy in Dickinson and Williston, is another who has turned to robot technology to cope with lower margins. "We are maxed out on staffing; we can't afford anymore," he says.

While the increased volume of prescriptions stimulated by Part D has helped these pharmacies stay afloat, it hasn't been enough to maintain a margin for growing staff to service the increased clientele.

"Our concern is how we can get back to providing service like we did before the volume," Treitline says. He expresses the desire to "do more" for customers, so that they understand the side effects of each drug and the impacts of lifestyle choices on overall health. "We should be doing this every time someone fills a prescription, but we don't have the time to even do it quarterly. The patients end up losing and our communities lose."

Treitline is also concerned about the transfer of community pharmacies to up-and-coming pharmacists. While many would like to serve rural areas, he says the profit margins rightfully scare them away.

Bonnie Thom of Velva Drug and Nathan Schlecht of Forman Drug are two pharmacists operating in some of the most rural areas of the state with city populations of about 1,000 and 500, respectively. The two share how they've coped with the Part D changes to continue providing services to their local senior citizens, who would otherwise have to travel significant distances to receive pharmaceutical care.

Schlecht explains that when Part D came into effect, most of his customers who were previously covered by Medicaid had to switch over. Along with this switch came a notable decrease in reimbursement to the pharmacy. The OIG study reports a $2 difference per prescription in Medicaid and Medicare dispensing payments. Coupled with the usual lags in reimbursement, hard times fell on the small pharmacy. "We weathered the storm on savings," Schlecht says.

After the initial impact of Part D, Schlecht was able to recover and remain profitable by cutting costs. His overhead is slim as he is the lone pharmacist (with the exception of a very part-time relief pharmacist), and his wife, Barb, is the technician. "We do everything we can to buy at the lowest price, because we know reimbursement is going to be a fight," he says.

Thom agrees and says the first thing she asks when looking at insurance companies is if they offer a rural rate. "Some do not," she says, "so we try to pick and choose."

Thom and the other pharmacists also buy as many generic drugs as possible to keep their costs and the costs to their customers down. She says this is difficult under Part D, since generics are increasingly being dropped from coverage.

For this reason, Thom says that Part D has increased dispensing time as explanations are needed to keep customers in-the-know about the changes. "If we don't help with this, they're kind of lost," she says. "The vast majority don't have computers and are not Internet savvy, so we need to help."

Taking Action

All of these North Dakota pharmacists say that reimbursement rates are not sufficient to provide this help—the level of care—that they feel is necessary to make sure that prescriptions are achieving desired goals. They say that more resources are needed to fund additional staff to explain the drugs and monitor their effects. And, finally, they assert that if these resources were made available through greater reimbursement or more flexibility in drug acquisition costs, the national payoff would be tremendous as healthcare costs decreased from more thorough pharmaceutical care.

So, what can pharmacists do to stimulate these changes and secure a future for community services? Sewell encourages them to ask their congressmen to fight for inclusion of the following provisions in the U.S. Health Bill:

- H.R. 3140: Saving Our Community Pharmacies Act of 2007
- S. 1951: Fair Medicaid Drug Payment Act of 2007
- H.R. 1474: Fair and Speedy Treatment of Medicare Prescription Drug Claims Act
- S. 1954: Pharmacy Access Improvement Act

More information on these acts can be obtained by contacting Sewell at (703) 763-8200 or charlie.sewell@ncpanet.org.

Treitline encourages fellow North Dakota pharmacists to come together to ensure that the next pharmacy facing a closure doesn't have to be. "We need to stay involved, contact our legislators and act as a group as much as we can," he says. "We need to support each other and just do the best job we can do."

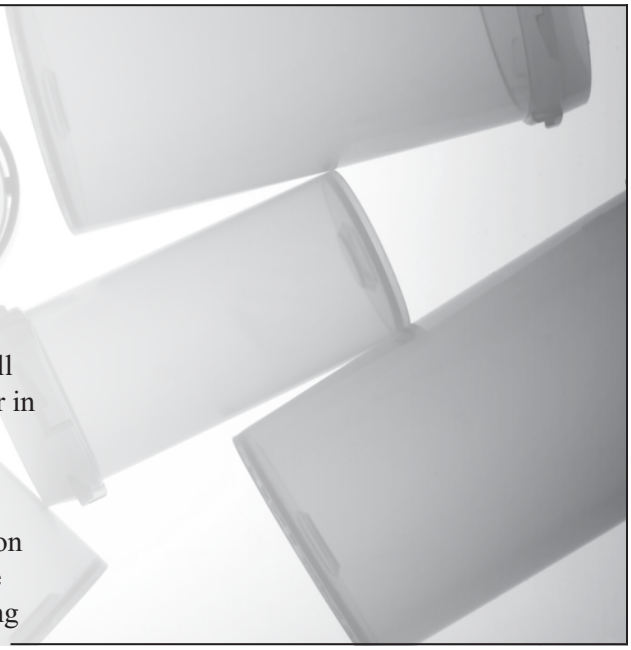
U.S. Congressmen – North Dakota

Sen. Kent Conrad
U.S. Federal Building, Room 228
220 E. Rosser Ave.
Bismarck, ND 58501
(701) 258-4648

Sen. Byron Dorgan
312 Federal Building
PO Box 2579
Bismarck, ND 58502
(701) 250-4618

Rep. Earl Pomeroy
Room 328, Federal Building
220 E. Rosser Ave.
Bismarck, ND 58501
(701) 224-0355

Tamper Resistant Prescription Pads Requirement



In 2007, Congress enacted Section 7002(b) of PL. 110-28 of the Iraq War Supplemental Appropriations Bill. This provision requires all Medicaid prescriptions to be written on "tamper-resistant" pads/paper in order to be eligible for reimbursement.

The use of "tamper-resistant" prescription pads/paper for ALL MEDICAID prescriptions will be enforced starting April 1, 2008. As of April 1, 2008, one of the following requirements must be in place on all Medicaid prescriptions in order to be reimbursed. (1) One or more industry-recognized features designed to prevent unauthorized copying of a completed or blank prescription form; (2) one or more industry recognized features designed to prevent the erasure or modification of information written on the prescription by the prescriber; (3) One or more industry-recognized features designed to prevent the use of counterfeit prescription forms.

No later than October 1, 2008, to be considered "tamper-resistant," States will require that the prescription pads/paper have all three characteristics. Providers who write prescriptions for Medicaid recipients should seriously consider including ALL THREE characteristics right away. This way you don't have to reorder pads/paper and you will be compliant from the start.

Please let our office know if you have any additional concerns, comments, and/or questions. NDPhA Phone: 701-258-4968, email: ndpha@nodakpharmacy.net.

Institute of Pharmacy Houses New Tenant

The North Carolina Association of Pharmacists is now sharing office space with Tom Murry, PharmD, JD, Executive Director of the Pharmacy Compounding Accreditation Board (PCAB).

Tom is a member of NCAP and has worked with the Association on a number of activities in the past. He approached NCAP because he believed that having his North Carolina office in proximity to NCAP would be synergistic for both organizations. NCAP's Executive Director, Fred Eckel, presented the idea to the Endowment Fund who also recognized the potential value in housing PCAB at its office in the Institute of Pharmacy building in Chapel Hill.

In 2004, PCAB was organized to create a voluntary system of nationwide standards for compounding pharmacies and was founded by eight of the nation's leading pharmacy organizations: American College of Apothecaries, American Pharmacists Association, International Academy of Compounding Pharmacists, National Association of Boards of Pharmacy, National Alliance of State Pharmacy Associations, National Home Infusion Association, National Community Pharmacists Association, and the United States Pharmacopeia. These organizations created PCAB because they felt it was an important step for the profession of pharmacy and the practice of compounding given the increased demand for compounded medications and the increased scrutiny of compounding from numerous fronts.

PCAB Mission

The mission of PCAB is to serve the public good by serving patients, prescribers, and the pharmacy profession. The PCAB mission is:

- to organize and carry out a comprehensive program of voluntary accreditation in the practice of pharmacy compounding.
- to promote, develop and maintain principles, policies and standards for the practice of pharmacy compounding in the public interest and to apply these in the accreditation of pharmacies that offer pharmacy compounding to improve the quality and safety of pharmacy compounding provided to the general public.
- to offer to the public and prescribers a way to identify the pharmacies that satisfy accreditation criteria.
- to provide a public forum for information on the practice of pharmacy compounding, and to educate the public on the importance of pharmacy compounding.

The PCAB Principles of Compounding and PCAB Standards are the two main tools by which PCAB carries out its mission.

PCAB Principles of Compounding

Every pharmacy that applies for PCAB Accreditation must agree to abide by the PCAB Principles of Compounding. These principles state that compounding is the preparation of components into a drug product either as the result of a practitioner's prescription drug order based on a valid practitioner/patient/pharmacist relationship in the course of professional practice, or for the purpose of, or as an incident to, research, teaching, or chemical analysis that are not for sale or dispensing. Additionally, the principles state that compounding is a part of the practice of pharmacy subject to regulation and oversight from the state boards of pharmacy and that compounded medication may be dispensed to prescribers for office use, where applicable state law permits. Office use does not include prescribers reselling compounded medications.

The principles allow for compounding conducted in anticipation of receiving prescription orders when based on routine, regularly observed prescribing patterns. This anticipatory compounding is limited to reasonable quantities, based on such patterns. The principles also state that compounding does not include the preparation of copies of commercially available drug products. Compounded preparations that produce, for the patient, a significant difference between the compounded drug and the comparable commercially available drug product or are determined, by the prescriber, as necessary for the medical best interest of the patient are not copies of commercially available products. "Significant" differences may include, for example, the removal of a dye for a medical reason (such as an allergic reaction), changes in strength, and changes in dosage form or delivery mechanism. Price differences are not a "significant" difference to justify compounding.

The principles state that both the prescriber (via the prescription) and the patient (via the label) should be aware that a compounded preparation is dispensed. The principles state the pharmacy may advertise or otherwise promote that it provides prescription drug compounding services. Such advertising should include only those claims, assertions, or inference of professional superiority in the compounding of drug products that can be independently and scientifically substantiated.

PCAB Standards

The PCAB standards are rigorous. PCAB uses two methods to determine whether a pharmacy is in compliance with the PCAB standards: (1) extensive review of written policies and procedures and (2) an on-site survey of the pharmacy. It is crucial to note that the pharmacy's written policies and procedures must reflect the actual practice of the pharmacy. A pharmacy which has a policy and procedure manual that meets PCAB standards, but the actual practice of the pharmacy fails to meet PCAB standards will not be awarded PCAB accreditation.

The PCAB standards cover several core areas of both sterile and non-sterile compounding, including training of personnel, storage of chemicals, proper equipment usage, beyond-use-dating, packaging, labeling, patient education, and quality assurance. It is important to note that PCAB requires compliance with both USP <795> and USP <797>.

PCAB Accredited Compounding Pharmacies

Many NCAP members often have patients who need a prescription compounded. When choosing a compounding pharmacy to whom you refer your patients, PCAB suggests looking for the designation "PCAB Accredited™ compounding pharmacy" or the PCAB Seal. For a list of PCAB Accredited compounding pharmacies in your area, visit http://www.pcab.org/find-a-pharmacy.shtml. Currently, there are two PCAB accredited pharmacies in North Carolina and thirty-two nationwide.

About Tom Murry

Tom earned his pharmacy degree at the University of Arkansas. Following graduation, he served as the National Community Pharmacy Association's first Executive Resident, and subsequently served as NCPA Director of Student Affairs. In May, 2007 Tom graduated from the Campbell University School of Law. Tom is licensed to practice law in North Carolina, and pharmacy in Arkansas, North Carolina, and Virginia. Tom, and his wife Tamara, who is also a pharmacist, have two daughters: Ella, almost 4 years old and Gretchen 13 months. Tom lives in Morrisville where he serves on the Town Board.

Know the Facts

You may have your reasons for not buying individual disability income (DI) insurance. But do you know the facts?

Reason 1: I can always buy coverage later.
Fact: People usually don't get healthier as they grow older, and coverage will cost more.

Reason 2: My family and friends will help me. Or I will use my savings.
Fact: Are your loved ones in a position to support you? Do you want them to? And, even with saving 10% of your salary, one year of disability could easily wipe out many years of savings.

Reason 3: I have disability coverage through my employer.
Fact: Group disability insurance typically covers 60% of gross income, and benefits are usually taxable. Can you afford more than a 40% pay cut?

Reason 4: It costs too much. I'll purchase it later.
Fact: The average annual cost is typically only 1% to 3% of what you earn. Plus, the longer you wait, the more likely the premiums will be more expensive.

Reason 5: It won't happen to me/I expect to stay healthy.
Fact: During the course of your career, you are 3 1/2 times more likely to be injured and need disability coverage than you are to die prematurely.1

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Sheila Welle
sheila.welle@phmic.com

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[1] Health Insurance Association of America, 2000. This is a general summary only. Additional guidelines apply. Disability insurance has limitations and exclusions. For costs and complete details of coverage, contact your Principal Life financial representative.

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Classifieds

PHARMACY FOR SALE

Peace Garden Pharmacy
PO Box 729, Dunseith ND 58329
Contact: Don Thompson 701-228-2291

Thompson Drug
505 Main, Bottineau ND 58318
Contact: Don Thompson 701-228-2291

Medical Pharmacy West
4101 13th Ave South
Fargo, ND 58104
Contact: John Sanger. Phone: 701-282-6510.

WANTED TO BUY A PHARMACY!

Young energetic pharmacist looking to purchase a pharmacy in the Fargo or surrounding area.
Will keep all information confidential.
Please call Kelly at 701-799-3354 or e-mail at ndrph@hotmail.com.

PHARMACIST WANTED

Pharmacist/Faculty at NDSU
North Dakota State University is seeking a full-time, non-tenure track pharmacist/faculty position in the Department of Pharmacy Practice. The individual will assist with teaching in the Concept Pharmacy instructional laboratory. Screening will begin March 10, 2008 and remain open until filled. *For a complete description of this job and other openings go to: http://www.ndsu.edu/ndsu/jobs/non_broadbanded NDSU is an equal opportunity institution.*

Gateway Pharmacy, Bismarck.
Progressive Pharmacy seeks energetic Pharmacist. Pharmacy is automated, provides screenings, and immunizations. *Contact: Mark Aurit, RPh Gateway Pharmacy North, 3101 N 11th St Ste#2, Bismarck, ND 58503 Ph: 701-224-9521 or 800-433-6718*

Walls Medicine Center, Grand Forks.
Contact Dennis Johnson, RPh, Wall's Medicine Center Inc., 708 S Washington Street, Grand Forks, ND 58201 or call (701) 746-0497.

PHARMACY TECHNICIAN WANTED

Northport Drug, Fargo.
Fulltime Pharmacy Technician Position Located in North Fargo. Salary based on experience. Full benefits. *Please send your resume to: Northport Drug attn: Rachel, 2522 North Broadway, Fargo, ND 58102 Or fax your resume to: (701)235-5544 attn: Rachel*

GREETING CARD FIXTURES FOR SALE

108 feet of American Greeting card fixtures + rounded endcap and shelving. *Please contact Matt Paulson, R.Ph. Carrington Drug 956 Main St. Carrington,ND 58421. Phone 701-652-2521 or email carringtondrug@daktel.com*

Pharmacy Time Capsules

1983 - Twenty-five years ago:

- Humulin (biosynthetic human insulin) approved by FDA. First health care product manufactured by means of recombinant DNA technology
- Zomax (zomepirac sodium) withdrawn from the market on March 4, 1982 after 2 ½ years because of concern with a high incidence of anaphylactic reactions.

1958 - Fifty years ago

- PMA formed from American Drug Manufacturers Association and American Pharmaceutical Manufacturers Association
- 76 accredited colleges of pharmacy graduate 4,000 pharmacists annually.

1933 - Seventy-fie year ago

- Pharmacy exhibit at the Chicago World's Fair, "Century of Progress", features the development of the profession over the past 100 years and its contributions to science, art, and history.
- U.S. Office of Education releases Leaflet No. 14 "Pharmacy as a Career". This is hailed as evidence of the recognition of the profession by the government. JAPhA 1933;22:1193

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Charles Peterson, Dean
NDSU College of Pharmacy

A Message from the Dean

NDSU's Telepharmacy Receives Additional Funding

Charles Peterson, Dean of Pharmacy, Nursing, and Allied Sciences recently received notice from Senator Byron Dorgan announcing the approval of $813,535 in federal funding for FY'08 for NDSU's North Dakota Telepharmacy Project (NDTP). The telepharmacy grant will be funded through HRSA's Office for the Advancement of Telehealth.

The new funding will be spent on developing telepharmacy services to small rural (critical access) hospitals across the state that are currently struggling to maintain pharmacists staffing and pharmacy services. Current studies indicate that 35% of rural hospitals have a pharmacist on-site for less than 40 hours per week, and 8% of hospitals have a pharmacist on-site for 2 hours or less per week. One-third of rural hospitals with 0.5 FTE or less pharmacist staffing share a pharmacist with another hospital. Dean Peterson states, "As a result, many rural hospitals have limited pharmacist coverage, which greatly impacts their ability to deliver even the most basic pharmacy services.

So, there is a critical need for telepharmacy services for remote rural (critical access hospitals) in North Dakota."

NDSU's telepharmacy was a featured program at this year's American Society of Health-Systems Pharmacists (ASHP) national convention in Las Vegas in early December. Dean Peterson hopes to use these funds to establish a national model for delivering telepharmacy services to remote rural hospitals that will make North Dakota a national leader in delivery of pharmacy services to rural areas.

The North Dakota Telepharmacy Project was established in 2002, to restore, retain, and establish access to pharmacist and pharmacy services in remote medically underserved rural communities of North Dakota. As of September 2007, there are fifty-seven participating pharmacies in 33 MUA counties including two in Minnesota serving a population of more than 40,000 rural citizens who previously had no access to a pharmacist or pharmacy services in their own community. The project has added between 50-60 new jobs and approximately $12.5 million annually in economic development to the local rural economy. Thus far, the NDTP has received more than $3.3 million to support its efforts.

Ann Rathke serves as Telepharmacy Coordinator, and Dr. David Scott, serves as Co-PI to the project.

Naughton chosen for Associate Dean

Dean Charles Peterson recently announced the appointment of Dr. Cindy Naughton as the College's new Associate Dean for Academic Affairs and Assessment. Dr. Naughton has been a full-time clinical faculty member in the department of pharmacy practice at NDSU since 2000. Dr. Naughton earned her BS in pharmacy, MS in pharmacy, and Pharm.D. degrees from North Dakota State University in 1978, 1986, and 1995, respectively. She is a board certified pharmacotherapy specialist (BCPS) with extensive clinical practice experience in a variety of health care settings including academia, large hospital, small hospital, clinic, and retail settings. Dr. Naughton has both didactic and clinical teaching experiences. Dr. Naughton has served on the pharmacy program curriculum committee since 2002, and has been chair since 2005. As chair of the curriculum committee, Dr. Naughton has provided valuable leadership in helping the College transform its pharmacy program curriculum to meet the new 2007 ACPE accreditation standards including working with faculty to define and incorporate a comprehensive curriculum re-evaluation, ability-based outcomes, introductory practice experiences, curriculum mapping, and faculty training. Dr. Naughton has also served on the College academic affairs committee, assessment committee, strategic planning coordination committee,

admissions committee, and department chair evaluation committee. Her honors and awards include being recipient of the 2004 and 2006 College's preceptor of the year award (pharmacy program), the 2001 ASHP's Best Practice in Health System Pharmacy Management Award, and the 1998 North Dakota Health System Pharmacist of the Year Award.

The Associate Dean position will be responsible for providing administrative oversight for all matters related to academic affairs and assessment including ensuring compliance with all curriculum and assessment accreditation standards. Dean Peterson states, "This is a critical position for our College and Dr. Naughton has a proven track record of success related to curriculum development and assessment. I am excited to have her join our administrative leadership team."

Dr. Naughton will begin her Associate Dean duties on July 1, 2008.

Pharmacy Week Activities

Submitted by Jeanne Frenzel, PharmD, RPh
Assistant Professor
College of Pharmacy, Nursing, and Allied Sciences North Dakota State University

Pharmacists, pharmacy technicians, and student interns at MeritCare South University hospital pharmacy, Fargo, decorated socks to promote deep vein thrombosis (DVT) awareness during National Hospital and Health-System Pharmacy Week in October 2007. Approximately 2,000,000 people in the United States are diagnosed with a DVT each year. Patient's who are hospitalized after undergoing major surgery, such as joint replacement, and who have restricted mobility following the operation are at an increased risk for DVT.[1] Pharmacists at MeritCare provide discharge consultation to patients prescribed warfarin (Coumadin) and enoxaparin (Lovenox) to educate patients about the prevention of DVT. Deep vein thrombosis Awareness by Design Kits are available for Healthcare Professionals via https://www.preventdvt.org/default.aspx.

1 http://www.lovenox.com/hcp/medicalProphylaxis/default.aspx

NAPT Updates

By Brittany Muchow - NAPT Presidnet

As I approach the end of my term as President of NAPT I look back total amazement on the number of projects the Executive Board has juggled this past year. These projects range from small ideas to extremely time consuming ones. Not all projects are complete yet, but effort was made to at least begin. I am very proud of this year's NAPT Executive Board members dedication and hard work they have demonstrated for our profession. I am sure the next year's members will resume where we have left off and achieve even greater success.

I have listed below the projects we are currently working on and provided a brief status report on each of them.

- **NAPT Fall Conference** – The 2008 Fall Conference will be held in Fargo on September 26 & 27th 2008. The host hotel will be The Homewood Suites located in North Fargo. During the Friday session we will be working in conjunction with NDSU and their concept lab. On Saturday we will hold meetings at the Skills and Technology Training Center. This Fall Conference will definitely be something different with a hands on approach to learning.

- **Traveling Meetings** – The Executive Board has been out to 8 different cities to promote NAPT and offer continuing education. This year we offered 1.5 hours of CE that qualifies as a law CE. The topic was Medication Errors: A Bitter Pill. The meetings were a great success and hopefully will be continued next year with the incoming Executive Board.

- **Technician Awards** – This year the Executive Board introduced 3 new awards besides Technician of the Year. Distinguished Young Pharmacy Technician, Diamond, and Friend of NAPT were all introduced this year. Nominations were due February 29, 2008. The winner of all 4 awards will be announced at the 2008 NDPhA Convention in Bismarck.

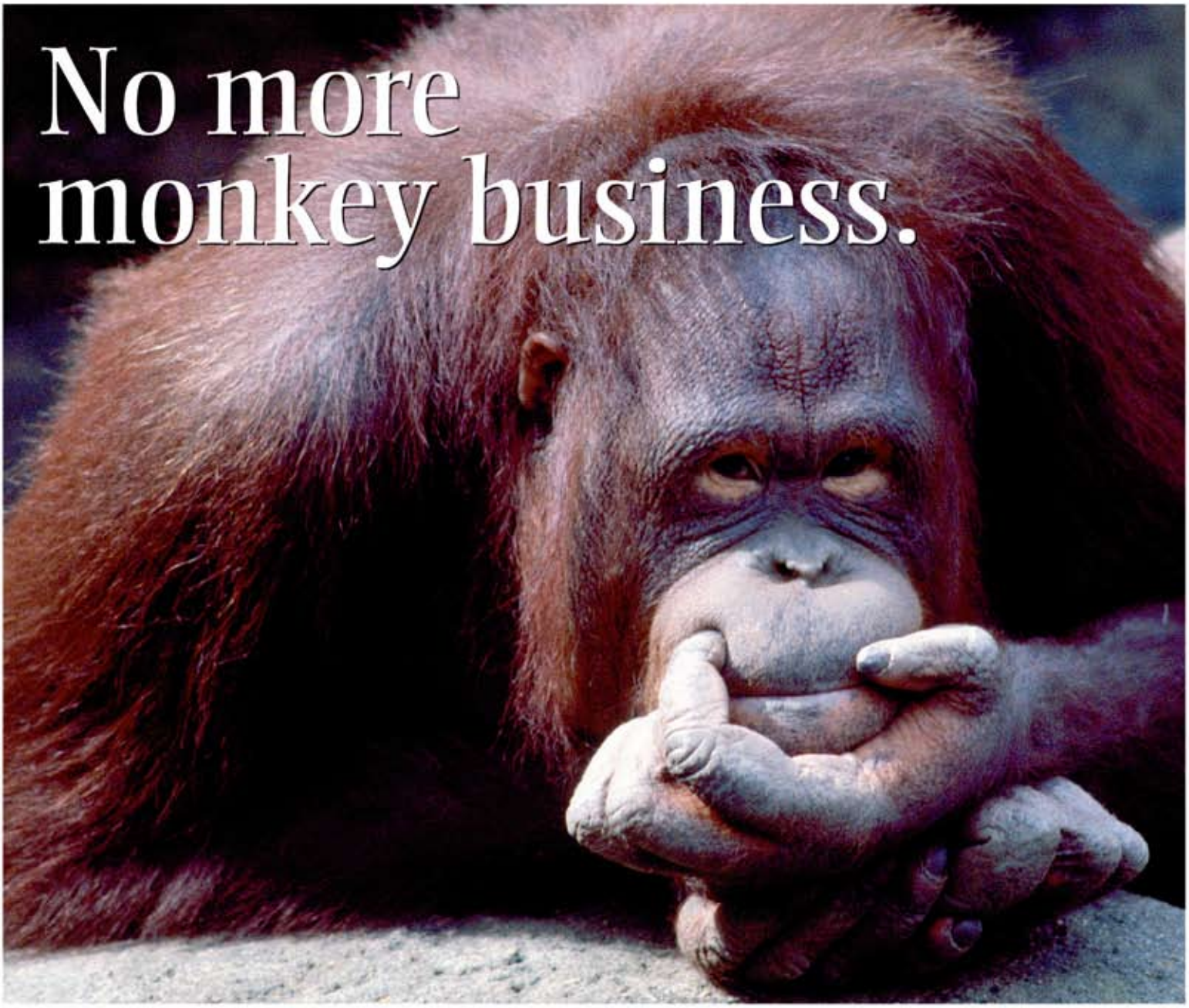
- **NAPT/NDPhA Relationship** – A final vote at the NDPhA Annual Convention will determine if NAPT will become an academy of NDPhA. If you choose to attend NDPhA's business meetings you will get CE for attending. (3 business meetings = 1hr of law CE)

- **NAPT E-mail Address** – NAPT has created an e-mailing list for the registered technicians. To get your name added to this listing, please send e-mail to rphtechnd@yahoo.com. If you do not have access to e-mail you may contact any member of the Executive Board and provide them with your name and address. This information (e-mail or mailing address) will be used to provide time sensitive information pertaining to the Pharmacy profession as well as any other important issues that may affect you.

- **Recruitment for NAPT Executive Board Members (2008-2009)** – The NAPT Executive Board is attempting to recruit and ND registered Pharmacy Technician who would like to serve on the board. If you are interested in possibly accepting this role, please contact any member of the current NAPT Executive Board and we can provide you with information on the position.

Please feel free to contact any member of the NAPT Executive Board to discuss any of the above topics or any other area of concern/interest you may have. We are here to serve the NAPT General Membership in any way possible and look forward from hearing from you!

Thank you very much for allowing me to be your President this year.



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Pharmacist Position Clinical Coordinator - Disease State Management Services

Reports to: Executive Vice President of NDPHA and NDPSC In Addition, Reports to: An Advisory Board

Location: North Dakota Status: Full-Time Contract: Yearly

Job Description:

Support the development, implementation and evaluation of programs, policies and procedures that promote high-quality, cost-effective utilization of pharmaceuticals within the provider network and to monitor patient care outcomes.

Basic Functions & Responsibilities:

- Champions the principle of pharmaceutical care in drug therapy management
- Ensure strict compliance with all standard professional policies and procedures
- Mentoring of pharmacists and pharmacy management team to increase their clinical effectiveness and counseling skills
- Recruit pharmacists and other possible providers
- Notify employer and PBM of appropriate providers
- Maintain the highest HIPPA standards possible
- "Contact person" for information regarding the program
- Work with employer and PBM to arrange for needed reports
- Notify all parties once participant enrolls
- Coordinate lab testing, when appropriate
- Monitor patients' therapies in relation to the patients' conditions to assure that drug therapy is appropriate
- Help to ensure data is being collected and reported correctly
- Be accessible to program participants (need to be able to travel to help fill any gaps in service)
- Other duties as assigned

Minimum Education Requirements:

- Licensure as a pharmacist by the North Dakota Board of Pharmacy; graduated from an accredited school of pharmacy; a doctorate in pharmacy practice is preferred and 3 years clinical experience preferred, but not required.

General Skills Required:

- Highly motivated and resilient professional
- Well organized
- Leadership and supervisory skills
- Excellent communications (written and verbal)
- Strong presentation skills
- Strong problem solving skills
- Grant writing experience preferred
- Demonstrated ability to balance economic, business and operational factors with care responsibilities
- High professional ethics and standards
- Strong computer skills
- Team player and ability to collaborate on multiple levels

Starting Date: April 2008

Please send a letter of interest and your resume to our office no later than March 15, 2008. No exceptions will be made. Thanks.

NDPhA NORTH DAKOTA PHARMACISTS ASSOCIATION

NDSU COLLEGE OF PHARMACY, NURSING, AND ALLIED SCIENCES

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